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Application No. 10/780,380
Response to Office Action of July 7, 2006
Attorney Docket: CL2207USNA1
Page 3 of 6**REMARKS**

Claims 1-7 are currently pending. Reconsideration is respectfully requested in view of the following remarks.

Rejections Under 35 U.S.C. § 103(a)

Claims 1-3 and 6 have been rejected under 35 U.S.C. §103(a). In the office action dated July 7, 2006, page 2, paragraph 4, the Examiner states, "Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderle et al. (WO 02/08327 A1) in view of Mosbach et al. (US 4764553) and the admitted prior art."

As a preliminary matter, Applicants adamantly assert that there is no admitted prior art set forth in the application, as alleged by the Examiner. The Examiner points to the paragraph beginning at line 21 on page 5 of the application for his allegation of an admission. This paragraph states:

Another critical element enabling the stability and simplicity of the process is the careful manipulation of polarity of the soft segment. One soft segment, which provides a good dispersion, in combination with the conditions for the aqueous dispersion and the right hard segments, is low molecular weight PTMEG with selected acid-functional-group-containing-diols. Another applicable THF copolymer soft segment containing an adequate amount (generally 25 to 60 percent by weight) of ethylene glycol as a comonomer. Methods of preparing such copolymers are disclosed in U.S. Pat. Nos. 4,127,513, 4,139,567, 4,153,186, 4,228,272, 4,235,751; German Pat. Application Nos. DE 86-3606479 and DE 83-3346136; and J. M. Hammond, et al., J. Polym. Sci., Part A, Vol. 9, p. 295 (1971) and Hongzhi Zhang, et al., J. Appl. Polym. Sci., Vol. 73, p. 2303 (1999). An example of an acid-functional-containing-diol is 2,2' dimethanolpropionic acid (DMPA). The content of ethylene oxide comonomer in PTMEG is 25-60% by weight.

The Examiner has alleged that this paragraph is an admission that, "methods for producing a THF copolymer soft segment comprising 25-60 percent by weight of ethylene glycol as a comonomer are known *and provide a good dispersion*. (The Office Action dated July 7, 2006, page 3, fourth full paragraph.) (emphasis added.)

The statement above, which is cited by the Examiner, is not an admission as to any potentially known properties of tetrahydrofuran (THF) copolymers including ethylene glycol as a

comonomer ("EOTHF copolymer"). To the contrary, the application states that a good dispersion is prepared by careful selection of the soft segment. Suitable soft segments include PTMEG with selected acid functionality and THF copolymer with sufficient ethylene oxide content. The references cited in the application are included to show suitable methods of preparing the EOTHF copolymers *only*. There is no admission as to any properties of the copolymers that may be disclosed in those references. Furthermore, the application includes no characterization of the references teachings with respect to the ability of the copolymers to form dispersions.

Given that there is no admission of the prior art present in the application, Applicants will address the rejections of claims with respect to the other cited references, Anderle and Mosbach. These rejections are traversed on the grounds that the combination of Anderle and Mosbach fail to establish a *prima facie* case of obviousness for failing to disclose every element of the present claims.

Anderle discloses a polyurethane dispersion that may include a polyether diol. The polyether diol may be derived from any alkylene oxide such as ethylene oxide, propylene oxide, butylene oxide, styrene oxide, tetrahydrofuran, epichlorohydrin, and mixtures thereof. (Anderle, page 11, lines 17-19. Anderle does not disclose copolymers of ethylene oxide and tetrahydrofuran.

The Examiner cited Mosbach for allegedly teaching that "it is well known to use a THF copolymer and ethylene glycol copolymer in a water dispersible polyurethane...in order to obtain a better polyurethane dispersion." (Office Action dated July 7, 2006, page 3, second full paragraph.) However, Mosbach provides no such teaching.

Mosbach is directed to a water dispersible polyurethane composition that includes a carboxylate segments with ammonium counterions. Mosbach provides no disclosure of EOTHF copolymer and no disclosure that the inclusion of EOTHF copolymer improves a polyurethane dispersion. Mosbach only teaches that the inclusion of a carboxylate with ammonium counterion improves the dispersion. Mosbach, in fact, excludes the copolymer THF copolymer of claim 1 in its teachings at column 4, lines 59-62, "A certain proportion of ethylene oxide may be used, provided that the resulting polyether diol does not contain more than about 10% by

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weight of ethylene oxide units." With a maximum allowable ethylene oxide content of 10% in a polyether diol, the range of the present invention is excluded. Specifically, the present invention requires that ethylene oxide be present in an amount from about 25 to about 60 percent by weight of the polymer. This is at least 2.5 times the maximum amount of ethylene oxide taught by Mosbach. Therefore, Mosbach's teachings are outside the scope of the present claims.

Since the combination of Anderle and Mosbach fail to disclose, teach or suggest every element of the present claims, they fail to establish a *prima facie* case of obviousness with respect to the present application. Reconsideration and withdrawal of the rejections of claims 1-3 and 6 under Section 103, are appropriate and respectfully requested.

Claims 4 and 5 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Anderle in view of Mosbach and the allegedly admitted prior art and further in view of U.S. Patent No. 5,198,523 to Baumann et al. ("Baumann"). This rejection is respectfully traversed.

The allegations regarding an admission with respect to the prior art have been discussed above, therefore, the rejections of claims 4 and 5 are reviewed only with respect to Anderle, Mosbach, and Baumann. Baumann is only cited to show the puncture strength and tear strength of the articles prepared therein. Given that Baumann teaches a thermoplastic polyurethane which is different from the polyurethanes taught by Anderle and Mosbach, the references are not properly combinable, since the properties of a particular polyurethane would not necessarily be the same as the properties of a different polyurethane. However, even if combined with Anderle and Mosbach, Baumann does not cure any of the deficiencies of those references in establishing a *prima facie* case of obviousness with respect to the claims from which claims 4 and 5 depend. Therefore, reconsideration and withdrawal of rejection of claims 4 and 5 are appropriate and respectfully requested.

Claim 7 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Anderle in view of Mosbach and the allegedly admitted prior art in view of U.S. Patent No. 5,998,540 to Lipkin et al. ("Lipkin"). This rejection is respectfully traversed.

Again, the alleged admission with respect to the prior art has been discussed above. Lipkin has only been cited to show the method of preparing a thin wall article. Anderle and

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Mosbach are cited, again, to allegedly show the remaining features of the inventive composition, and are insufficient to establish a *prima facie* case of obviousness as discussed above. Considering that Lipkin is only cited to show the method of preparing the article, Lipkin fails to overcome the deficiencies of Anderle and Mosbach. Therefore, the combination of Lipkin with Anderle and Mosbach fails to disclose, teach or suggest every element of claim 7. Accordingly, reconsideration and withdrawal of the rejection of claim 7 are appropriate and respectfully requested.

DOUBLE PATENTING

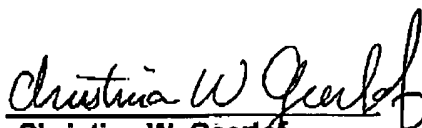
Claims 1-7 have been provisionally rejected on the grounds of non-statutory obviousness-type double patenting over U.S. Application Nos. 10/700,859 and 10/701,317 in combination with various other references. Applicants will consider the timely filing of a terminal disclaimer upon a finding of allowable subject matter.

CONCLUSION

For the reasons stated above, claims 1-7 are believed to be in condition for allowance. Accordingly, Applicants respectfully request that the Application be allowed. If prosecution may be further advanced, the Examiner is invited to telephone the undersigned to discuss this application.

Date: 11-29-06

Respectfully submitted,



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